EXHIBIT B

UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF NEW YORK

Consolidated Case No. 09-cv-006869(SAS)(DF)
- - - - - - - - - - - - - - - - - - - -x
BOARD OF TRUSTEES OF THE AFTRA RETIREMENT FUND, in its capacity as a fiduciary of the AFTRA Retirement Fund, individually and on behalf of all others similarly situated,
Plaintiff,
-against-
JPMORGAN CHASE BANK, N.A.,
Defendant.
- - - - - - - - - - - - - - - - - - - -x

December 3, 2010
9:06 a.m.

Videotaped Deposition of BERNARD S. BLACK, taken by Defendant, pursuant to notice, held at the offices of Paul Weiss Rifkind Wharton & Garrison, LLP, 1285 Avenue of the Americas, New York, New York, before Helen Mitchell, a Shorthand Reporter and Notary Public.

APPEARANCES:

BARROWAY TOPAZ KESSLER MELTZER CHECK LLP
Attorneys for Plaintiffs
280 King of Prussia Road
Radnor, Pennsylvania 19087

BY: PETER H. LEVAN, JR.,ESQ.
SHANNON O. LACK, ESQ.

PAUL WEISS RIFKIND WHARTON & GARRISON, LLP
Attorneys for Defendant
1285 Avenue of the Americas
New York, New York 10019

BY: LEWIS R. CLAYTON, ESQ.
YITZCHAK SOLAVEICHIK, ESQ
SATYAM N. BEE, ESQ.

ALSO PRESENT:

ROBERT CALVERT - Videographer

LINDA DALY, ESQ.
JPMorgan Chase Bank, N.A

BLACK

(Expert report of Bernard S. Black marked Black Exhibit 1 for identification.)

(Document marked Black Exhibit 2 for identification.)

THE VIDEOGRAPHER: We are now on 09:05:41 the record. This is the video operator 09:06:59 speaking, Robert Calvert, of Veritext 09:07:02 Reporting. 09:07:04

Today's date is December 3rd, 09:07:05 2010. The time on the video monitor is 09:07:07 9:06 a.m. 09:07:10

We are here at the offices of Paul 09:07:12 Weiss Rifkind Wharton & Garrison, 09:07:14 located at 1285 Avenue of the Americas, 09:07:17 New York, New York, to take the 09:07:20 videotape deposition of Professor 09:07:26 Bernard S. Black, in the matter of The 09:07:28 Board of Trustees of the AFTRA 09:07:29 Retirement Fund, in its capacity as the 09:07:31 fiduciary of the AFTRA Retirement Fund, 09:07:33 individually and on behalf of all others 09:07:36 similarly situated, versus JPMorgan 09:07:38 Chase Bank, N.A. The venue of this case 09:07:40

BLACK

is the United States District Court for 09:07:45 the Southern District of New York, index 09:07:47 number 09-CIV-686(SAS). 09:07:49

Will counsel please voice identify 09:07:57 yourselves, and state whom you 09:07:58 represent. 09:08:00

MR. CLAYTON: This is Lou Clayton 09:08:01 at Paul Weiss, for the defendant. I'm 09:08:03 here with Ezi Soloveichik, also of Paul 09:08:06 Weiss. 09:08:09

MR. LeVAN: Tad LeVan of Barroway 09:08:10 Topaz Kessler Meltzer & Check, on behalf 09:08:12 of the plaintiff and the witness. I'm 09:08:14 also here with my colleague, Shannon 09:08:16 Lack. 09:08:18

MS. DALY: Linda Daly, JPMorgan 09:08:19 Chase. 09:08:19

THE VIDEOGRAPHER: Will our court 09:08:22 reporter please swear in the witness. 09:08:23

B E R N A R D S. B L A C K, 09:08:24
having been first duly sworn by the Notary 09:08:24 Public (Helen Mitchell), was examined and 09:08:24 testified as follows: 09:08:24

THE VIDEOGRAPHER: Please begin. 09:08:36

BLACK

EXAMINATION 09:08:37
BY MR. CLAYTON: 09:08:37
Q You are Bernard Black? 09:08:37
A I am. 09:08:38
Q How are you employed? 09:08:38
A I am the Nicholas J. Chabraja, 09:08:39 C-h-a-b-r-a-j-a, professor at Northwestern 09:08:46 University, and I have appointments in the law 09:08:50 school and in the Kellogg School of Management. 09:08:52
Q You've had your deposition taken 09:08:56 on many occasions; correct? 09:08:57
A Yes. 09:08:58
Q You're familiar with the process; 09:08:59 correct? 09:09:00
A Yes. 09:09:00
Q Have you ever been a financial 09:09:02 analyst? 09:09:03
A No. 09:09:05
Q What is a financial analyst? 09:09:06
A I would say a financial analyst is 09:09:09 someone who, as their profession, evaluates 09:09:11 securities, often publicly traded securities. I 09:09:19 certainly wouldn't limit it to the public 09:09:22 market, so you'll have financial analysts in 09:09:24

BLACK

banks that will evaluate loans to -- that the 09:09:27 bank might undertake. 09:09:32
Q When you say "securities," you're 09:09:33 including equity and debt securities; correct? 09:09:35
A Yes. 09:09:38
Q Have you ever supervised a 09:09:38 financial analyst? 09:09:41
A Only in a quite indirect sense. 09:09:47
Q And what indirect sense was that? 09:09:50
A So I was for a period of time a 09:09:52 member of the board of directors of Kookmin 09:09:57 Bank, K-o-o-k-m-i-n, which is the largest 09:09:58 commercial bank in Korea, and I was a member of 09:10:04 the risk management committee, and so in that 09:10:06 capacity Kookmin Bank, obviously, employed 09:10:12 financial analysts. 09:10:15
Q How many times did you meet with 09:10:16 financial analysts of Kookmin Bank? 09:10:17
A It depends on whether you would 09:10:22 call their sort of chief risk management officer 09:10:23 a financial analyst. Certainly part of what he 09:10:28 did was assess risk and conduct financial 09:10:31 analysis. 09:10:34
Q Did you ever specifically review a 09:10:35

BLACK

financial analysis on a particular security that 09:10:38 he did? 09:10:41
A I don't recall him having analyzed 09:10:49 specific securities, as opposed to the overall 09:10:52 risk of a type of investment. 09:10:57
Q So, therefore, you don't recall 09:11:00 ever reviewing any work he did concerning a 09:11:02 specific security; correct? 09:11:06
A I do not recall that. 09:11:09
Q When did you get off the board of 09:11:12 Kookmin Bank? 09:11:14
A In 2005. 09:11:15
Q Kookmin Bank is the subject of 09:11:18 certain investigations in Korea now; is that 09:11:20 right? 09:11:22
A I do not have personal knowledge 09:11:26 because I'm no longer on the board of Kookmin 09:11:28 Bank and don't follow it closely. 09:11:30
Q You don't follow it closely, but 09:11:32 you do know that the bank was sanctioned by 09:11:33 Korean authorities; is that correct? 09:11:40
A It has been in the past, yes. 09:11:41
Q Well, it has been sanctioned by 09:11:43 financial authorities in Korea; correct? 09:11:45

BLACK

MR. LeVAN: Objection. 09:11:47
A I thought I agreed with you. 09:11:47
Q Okay. You said "in the past," but 09:11:49 it was sanctioned; correct? 09:11:51
A Well, you asked whether they're 09:11:52 currently under investigation, and then that's 09:11:54 why I said "in the past." So, yes, in the past 09:11:55 they've been sanctioned. Whether they've been 09:12:00 recently sanctioned or recently investigated, I 09:12:02 don't know. 09:12:04
Q What was the reason for the 09:12:04 sanction? 09:12:05
A There was a dispute between the 09:12:08 Korean bank regulator, the ministry of finance 09:12:14 in effect, and Kookmin Bank over the manner in 09:12:17 which it allocated income and loss to its 09:12:22 principal bank, as opposed to other parts of the 09:12:35 bank holding company, during the period that I 09:12:38 was on the board that led to a sanction against 09:12:42 Kookmin Bank. 09:12:47
Q And you were on the audit 09:12:48 committee at a time when this allocation of 09:12:48 income and loss, that was later the subject of 09:12:50 this sanction, was in effect; is that correct? 09:12:54

Page 13

BLACK
Q Why did you leave the board? 09:16:52
A I made myself too much of a pain 09:16:54
in the neck, and they decided not to renominate 09:16:55
me after a couple of years. 09:16:58
Q Is that what they told their 09:16:59
stockholders? 09:17:01
A No. 09:17:02
Q What did they tell their 09:17:02
stockholders about why you were continuing not 09:17:03
to serve? 09:17:06
A This is my personal 09:17:07
interpretation, okay; this is not what they told 09:17:08
me or they told their stockholders. 09:17:09
Q I didn't ask you whether it was 09:17:11
your personal -- 09:17:12
A I just want to be clear. 09:17:13
Q My question was relatively 09:17:14
straightforward. 09:17:16
MR. LeVAN: Let him finish his 09:17:17
answer, please. 09:17:17
Q My question was what did they tell 09:17:18
their stockholders about why you left? 09:17:19
A I don't believe that they told 09:17:22
their stockholders anything, they just told 09:17:23

Page 14

BLACK
their stockholders who the new nominees were. 09:17:25
Q Did you ever inform any 09:17:30
stockholders or investors of the reason that you 09:17:31
believe that your board service ended? 09:17:33
A I did not. 09:17:38
Q Okay. 09:17:38
What's a repo cliff? 09:17:42
A This is a term that I use in my 09:17:43
expert report in this case to describe, in 09:17:47
colloquial fashion, if you will, a risk that 09:17:55
Sigma's -- and I'll use the term "Sigma" to mean 09:18:00
Sigma Finance Corp. and various affiliated 09:18:05
entities -- use of repurchase agreements -- 09:18:07
which I will call "repo," if I may -- in order 09:18:15
to finance its operations. I use this term to 09:18:19
describe a risk that that manner of financing 09:18:26
posed to the eventual recovery for the longer 09:18:28
dated Sigma senior notes, which are in this case 09:18:35
often called medium-term notes, or MTNs -- 09:18:41
typically capital MTN, small S. 09:18:46
Q Who has previously used the 09:18:52
concept of repo cliff, to your knowledge? 09:18:53
A I made it up. 09:18:56
Q You made it up. Just for this 09:18:56

Page 15

BLACK
case? 09:19:00
A I made it up just for this case. 09:19:01
Q How do we know when we have a repo 09:19:03
cliff? What are the conditions that we need to 09:19:07
have in order to know that such a repo cliff, as 09:19:09
you put it, exists? 09:19:14
A So I think the conditions that I 09:19:17
observed in Sigma's financing is that it was 09:19:26
borrowing short, or financing short, in the 09:19:32
sense that its liabilities had relatively short 09:19:34
maturities, and it was investing long, or at 09:19:38
least longer, in the sense that its assets had 09:19:43
longer maturities. 09:19:47
That would create a problem for 09:19:54
Sigma if it got to the point where it could not 09:19:56
refinance its assets, because the maturing 09:19:59
assets would mature fast -- sorry. Let me 09:20:07
rephrase. 09:20:11
That would create a problem if 09:20:12
Sigma could not refinance its liabilities 09:20:13
because its maturing liabilities would mature 09:20:16
faster than its assets would mature, and that 09:20:21
would create a mismatch between cash needs and 09:20:24
cash availability. 09:20:27

Page 16

BLACK
Q Okay, so let's list, if we can, 09:20:31
the conditions, or the events, that you believe 09:20:35
tell us that we have a repo cliff. I'm going to 09:20:40
try to do that now. 09:20:44
A Okay. 09:20:45
Q Okay. First you said an entity is 09:20:46
borrowing short; is that right? 09:20:51
A Yes. 09:20:54
Q How do I know when someone is 09:20:54
borrowing short? When I say "someone" I mean an 09:20:55
entity, obviously. 09:20:59
A We know from Sigma's financial 09:21:00
statements some information about the maturity 09:21:03
of their liabilities. You could also get that 09:21:07
from Bloomberg, which reported all of their 09:21:11
issuances. And I believe in the middle of 2007 09:21:14
the weighted average life of their liabilities 09:21:18
was 1.1 to 1.2 years, something in that range. 09:21:20
So short in this context means 1.1 to 1.2 years. 09:21:26
Q Well, I'm looking to see what 09:21:30
conditions you believe create a repo cliff, 09:21:35
whether those conditions apply to Sigma or some 09:21:38
other entity. 09:21:41
A So -- 09:21:43

BLACK

Q So are you saying that if I borrow with a weighted average maturity of 1.1 to 1.2 years, that's borrowing short? 09:21:44 09:21:46 09:21:49

A The key here is that Sigma was borrowing shorter than it was investing, so its assets had a weighted average life in the range of three to four years, its liabilities had a weighted average life of a bit over one year. There's nothing magic about the 1.1 or 1.2 years. The liquidity risk to Sigma is created because it is borrowing or financing shorter than it is investing, and this is a common and well-understood risk for financial institutions. 09:21:54 09:21:56 09:22:04 09:22:06 09:22:09 09:22:12 09:22:15 09:22:21 09:22:26 09:22:30

Q Okay. So if I'm understanding you correctly, what you're saying is that a repo cliff exists any time an entity is borrowing with a weighted average life of its obligations that is less than the weighted average life of the maturity of its assets? 09:22:36 09:22:37 09:22:42 09:22:49 09:22:54 09:22:57

A No. 09:22:59

Q Okay. 09:23:00

A What I said is that if you have a business, a financial institution, that is borrowing shorter than it is investing -- let's 09:23:05 09:23:10 09:23:12

BLACK

say significantly shorter, which was the case here, that financial institution faces a risk that it may, in a time of financial stress, be unable to roll over or refinance its liabilities. And if it is unable to roll over or refinance its liabilities, then it has a problem because its liabilities are going to mature faster than its assets. Let me call that a liquidity risk. That's not a repo cliff, that's a liquidity risk that Sigma faced, and, as I say in my report, I think it should have been apparent to a sophisticated, prudent investor that Sigma faced such a risk. 09:23:15 09:23:17 09:23:26 09:23:34 09:23:39 09:23:44 09:23:48 09:23:52 09:23:55 09:23:59 09:24:04 09:24:07 09:24:09

Q I didn't ask you to define liquidity risk. I'm trying to get you to define for us this concept of repo cliff, and my questions are designed to see if you can tell us when a person other than you can determine whether a particular entity has a repo cliff. 09:24:13 09:24:16 09:24:19 09:24:22 09:24:26 09:24:32

So would you now tell us, what are the indicia of a repo cliff that determine whether an entity has such a cliff or doesn't? 09:24:37 09:24:43 09:24:45

MR. LeVAN: Objection. 09:24:48

A So, the next piece of what I call 09:24:49

BLACK

a repo cliff in order to describe the risk of Sigma's business strategy is as follows: 09:24:56 09:24:59

One strategy for trying to survive a financial crisis, during which Sigma could not issue new liabilities to the -- let me call it the quasi-public market, the 144A market -- the commercial paper market -- in order to replace its existing liabilities was to enter into repo transactions with banks. These transactions were viable at that time, even though issuing commercial paper and additional medium term notes was not viable because they provided greater security, greater protection, to the repo lenders. The manner in which they provided that greater protection was that the senior note holders, or the commercial paper holders, held a senior, sort of secured floating lien, if I could call it that, on all of Sigma's assets, in the event that Sigma were to fail, but they had no immediate claim on any specific assets. 09:25:12 09:25:19 09:25:26 09:25:28 09:25:33 09:25:43 09:25:46 09:25:52 09:25:59 09:26:05 09:26:07 09:26:12 09:26:14 09:26:21 09:26:23 09:26:28 09:26:34 09:26:41

In contrast, a repo lender would take as security some amount of Sigma assets -- the amount will be important, so I need to come back to that -- and would take title to those 09:26:46 09:26:49 09:26:56 09:26:57

BLACK

assets. That's where the term "repurchase" comes from. As a formal matter, the repo lender, it buys the assets, owns the assets, can dispose of the assets, and then will return them at a later date if the repo borrower repays the "loan." So the repo lender is in a stronger position than a commercial paper lender or an MTN lender would have been. 09:27:01 09:27:05 09:27:10 09:27:16 09:27:19 09:27:23 09:27:29 09:27:37

The repo lender's position is further strengthened by the common practice of overcollateralization of repo loans, where the repo lender says to the repo borrower, "I will lend you a million dollars, but you have to give me back in return assets with a market value more than a million dollars." The difference between the market value of the assets that's being pledged and the amount of the loan, the amount of the cash that's delivered to the repo borrower, can be described as overcollateralization, and it's also sometimes called margin. 09:27:41 09:27:44 09:27:49 09:27:55 09:28:00 09:28:04 09:28:10 09:28:16 09:28:19 09:28:21 09:28:25 09:28:30 09:28:32

Q So if an entity has what you've called this liquidity risk -- 09:28:36 09:28:39

A Right. 09:28:41

BLACK

Q -- and if the entity has entered 09:28:42
into some amount of repo agreements -- 09:28:43
A Right. 09:28:46
Q -- we have a repo cliff? 09:28:46
A No. 09:28:48
Q Okay. 09:28:48
Besides those two conditions, what 09:28:49
are the other conditions necessary -- 09:28:55
MR. CLAYTON: Strike that 09:28:57
question. 09:28:58
Q So am I correct that simply 09:28:58
because an entity has a liquidity risk, as 09:29:00
you've described it, and has entered into some 09:29:02
amount of repo agreements, that doesn't mean 09:29:05
there's a repo cliff; right? 09:29:07
A The repo cliff -- 09:29:14
Q Can you answer that yes or no? 09:29:15
MR. LeVAN: Let him answer your 09:29:16
question. 09:29:17
Q I'm trying to get a list, if it's 09:29:18
possible to do so, of the conditions that you 09:29:20
say add up to a repo cliff, and I'm just at this 09:29:23
point trying to establish whether I'm correct 09:29:28
that in your view an entity that has what you 09:29:31

BLACK

call a liquidity risk, and also has entered into 09:29:36
some amount of repo agreements, does not 09:29:39
necessarily have a repo cliff; is that right? 09:29:42
A I will agree with that if you 09:29:47
replace the ambiguous term "some" with the term 09:29:48
"modest" in relation to its assets. 09:29:51
Q Fine. Okay, good. 09:29:55
Now, how do we make the 09:29:57
judgment -- what is the number, the 09:29:58
percentage -- that tells us whether that 09:30:00
percentage is modest or not modest? 09:30:04
A So here's how I would go about 09:30:09
that, right. 09:30:11
Let me assume a margin of 09:30:13
10 percent. That's an approximation to the 09:30:15
margins that Sigma's repo lenders actually used. 09:30:21
In some cases they were willing to lend with 09:30:26
slightly lower margins, and it's also the case 09:30:29
that 10 percent was the maximum margin that 09:30:35
Sigma was allowed to engage in repo at. 09:30:38
So let me assume, to start out 09:30:48
with, that Sigma has some collection of assets 09:30:50
and some collection of liabilities. In 09:30:56
practice, Sigma had some of what I want to call 09:31:02

BLACK

quasi-equity; it had some capital notes, which 09:31:05
were debt in form, but were subordinated to the 09:31:09
medium-term notes. Okay. 09:31:12
So in round numbers, in 09:31:17
August 2007, Sigma has $54 billion in book value 09:31:20
of assets, $54 billion in market value of 09:31:25
assets, $50 billion in senior notes and 09:31:30
commercial paper, and repo -- they have a little 09:31:37
bit of repo at the time, and about $4 billion in 09:31:40
capital notes. All of these numbers are from 09:31:44
memory, and therefore approximate, but the 09:31:47
actual numbers are reasonably knowable from 09:31:49
Sigma's financial statements at the time. 09:31:55
So at this point, subject to the 09:31:59
existing 1 billion in repo, which is a small 09:32:03
percentage of the aggregate, Sigma's commercial 09:32:06
paper and senior notes can be seen as 09:32:12
overcollateralized in the collective sense -- 09:32:19
the senior note holders can't grab particular 09:32:24
assets -- by about $4 billion. There's 09:32:27
$4 billion of quasi-equity that would have to be 09:32:30
lost before there would be loss of value to the 09:32:33
senior note holders, okay. 09:32:36
So at this point let's suppose 09:32:40

BLACK

that a couple of things happen. One is asset 09:32:42
prices start to deteriorate, so that the 09:32:48
4 billion in quasi-equity is now becoming less 09:32:56
than 4 billion gradually over time -- 09:33:00
Q Mr. Black, just so that you have 09:33:04
my question in mind, I am not asking you to 09:33:06
discourse, necessarily, about Sigma; my question 09:33:08
is you said that there has to be some amount of 09:33:11
repo, and I'm interested in a quantitative 09:33:16
measure so that we can apply your repo cliff 09:33:18
idea to Sigma or other entities. 09:33:21
Can you -- can you -- I mean, you 09:33:25
need to answer the question, if you can, in 09:33:27
whatever way you think is appropriate and 09:33:29
accurate, but what I'm looking for is, what is 09:33:31
the quantitative test that tells you when there 09:33:35
is enough repo outstanding so that an entity -- 09:33:38
Sigma or any other entity -- has a repo cliff. 09:33:43
A I am -- 09:33:47
Q That's what I'd like you to 09:33:47
answer. 09:33:49
A I am working on that. 09:33:50
MR. LeVAN: Objection. 09:33:51
This is the third time in a row 09:33:51

BLACK

you've interrupted this witness. You're going to allow this witness to answer the questions. He's in the process of answering your questions. 09:33:52 09:33:53 09:33:54 09:33:56

MR. CLAYTON: I'm not going to -- Tad, I'm not going to engage in colloquy. 09:33:57 09:33:57 09:34:00

MR. LeVAN: If you do not allow him to allow him to answer his questions, we'll shut it down. 09:34:01 09:34:02 09:34:03

MR. CLAYTON: I'm not going to debate you. You know what the rules are. 09:34:05 09:34:05 09:34:07

MR. LeVAN: And so do you. 09:34:07

MR. CLAYTON: And I'm not going to -- I'm not going to engage in colloquy, it's improper. If you want to object to the form, object to the form. 09:34:08 09:34:09 09:34:09 09:34:11

MR. LeVAN: I'm objecting to your inability of allowing the witness to answer the question. 09:34:12 09:34:13 09:34:15

MR. CLAYTON: Tad -- 09:34:16

MR. LeVAN: Okay. 09:34:16

MR. CLAYTON: -- I'm not going to 09:34:16

BLACK

engage in colloquy. 09:34:17

And just for the record, the fact that I don't engage in colloquy doesn't mean that I am in agreement with anything that counsel for the plaintiffs says. So let's -- 09:34:18 09:34:19 09:34:21 09:34:22 09:34:25

MR. LeVAN: I've asked you three times to let the witness answer your question. 09:34:25 09:34:26 09:34:28

BY MR. CLAYTON: 09:34:28

Q Now -- now do you understand I think what I'm getting at? I'm looking to see how we can apply your repo cliff concept, not just to Sigma but to any financial entity. 09:34:31 09:34:34 09:34:37 09:34:40

So if you can -- if you can, tell us whether there is a percentage test, a numerical test, I would like to hear it. If it's just a subjective test that you have to apply looking at all the facts and circumstances, you can tell us that, too, but that's what I'm trying to get at in this question. 09:34:44 09:34:47 09:34:50 09:34:54 09:34:56 09:34:57 09:35:00 09:35:01

MR. LeVAN: Objection. 09:35:03

Q If you could please go ahead, I'd 09:35:03

BLACK

appreciate it. 09:35:04

A So let me continue to describe what I think the risk was that was facing Sigma that I describe in my report as a repo cliff. 09:35:13 09:35:14 09:35:16

Q Well, my question is this, Mr. Black: Not -- not -- I'm not asking you to describe what you see as the risk to Sigma resulting from a repo cliff, I'm looking for a definition of repo cliff. 09:35:19 09:35:23 09:35:24 09:35:26 09:35:28

You told me that part of it is liquidity risk, and part of it is some amount -- we don't know what amount -- of repo. And I'm asking you now, can you give us a definition that is applicable to Sigma and to other entities of the quantitative amount of repo in -- in comparison to assets, liabilities, or some other quantitative measure that tells you when an entity has enough repo so that it has a repo cliff? 09:35:29 09:35:31 09:35:36 09:35:39 09:35:43 09:35:45 09:35:48 09:35:52 09:35:56 09:36:00

MR. LeVAN: Objection. 09:36:02

A There are additional factors that would go into an assessment of what the risks were to Sigma's MTNs from Sigma's business strategy. 09:36:03 09:36:08 09:36:11 09:36:15

BLACK

Q I'm not asking you about the risks to Sigma or holders of Sigma MTNs, I'm looking for a definition of repo cliff. 09:36:16 09:36:18 09:36:24

You first told us about liquidity risk. You then told us that there has to be a certain amount of repo that an entity holds. 09:36:26 09:36:27 09:36:29

Can -- do you have -- and if you don't, you don't, but do you have a definition of the amount of repo that an entity must hold in order for there to be a repo cliff? 09:36:33 09:36:35 09:36:38 09:36:42

MR. LeVAN: Objection. 09:36:47

Q Can you answer that yes or no, whether you have such a definition? 09:36:47 09:36:48

A What I was doing in my report was using the term "repo cliff" to describe a business risk that Sigma's strategy posed for its MTN holders. 09:36:50 09:36:55 09:36:58 09:37:03

Q I understand that. My question is -- 09:37:05 09:37:06

A And you have not yet allowed me to describe that business risk -- 09:37:08 09:37:09

Q I'm not asking you -- 09:37:11

A -- in sufficient detail in order to explain what I think a repo cliff is. 09:37:12 09:37:13

Page 29

BLACK
Q Mr. -- 09:37:17
A So if you keep on interrupting me, 09:37:18
that's fine, I'm going to say you haven't let me 09:37:19
answer. 09:37:21
Q Let me ask you this question. 09:37:22
Let's assume there's an entity, 09:37:23
and we're going to call it the Kookmin Bank -- 09:37:25
we'll say it's an American bank, it's not a 09:37:28
Korean bank, okay. Let's assume there's a 09:37:31
bank -- 09:37:33
MR. CLAYTON: In fact, I'll 09:37:34
withdraw that question, because you had 09:37:34
some association with that bank. 09:37:35
Q Let's call it the Black -- the 09:37:37
Bernard Black Bank. 09:37:40
A Okay. 09:37:42
Q And it's in the United States. 09:37:42
A Yup. 09:37:44
Q And it has a capital structure; 09:37:44
correct? 09:37:48
A Yes. 09:37:48
Q And let's assume that it -- as you 09:37:48
put it, it has a liquidity risk because it is 09:37:51
borrowing shorter than the life of its assets. 09:37:54

Page 30

BLACK
A Significantly shorter. 09:37:57
Q Significantly shorter. Good, 09:37:58
okay. 09:38:00
It's borrowing significantly 09:38:01
shorter. And let's also assume that we know it 09:38:02
has some amount of repo. Okay? 09:38:06
A Yes. 09:38:09
Q Okay. 09:38:10
So let's -- before we go on, let's 09:38:12
ask a question or two about what we just 09:38:16
established. 09:38:20
So you said it was -- it's got to 09:38:20
be borrowing significantly shorter. 09:38:23
Is there a definition that you can 09:38:27
give us of when an entity is borrowing 09:38:28
significantly shorter than the life of its 09:38:31
assets? 09:38:33
A It is clear that Sigma was 09:38:35
borrowing significantly enough shorter so that 09:38:39
it faced a significant liquidity risk. 09:38:44
Q Mr. Black, I'm not asking about 09:38:46
Sigma, I'm asking you about this hypothetical. 09:38:48
We have a hypothetical Black Bank, the Bernard 09:38:49
Black Bank, in the United States, and I'm 09:38:52

Page 31

BLACK
thinking -- you're an expert, so we can work 09:38:58
with hypotheticals, right -- I'm thinking of 09:39:00
investing in medium-term notes that are issued 09:39:04
by the Bernard Black Bank in the United States, 09:39:06
and my investment advisor comes to me and says 09:39:09
that this Bernard Black Bank is borrowing 09:39:12
shorter than its assets. And I say to my 09:39:17
investment advisor, "Is it borrowing 09:39:20
significantly shorter than its assets?" How 09:39:22
would my investment advisor go about determining 09:39:25
whether this bank is borrowing significantly 09:39:28
shorter than its assets? 09:39:31
MR. LeVAN: Objection. 09:39:33
A So one thing that you know is if 09:39:33
you want to pose me a hypothetical, it has to be 09:39:35
completely specified, and I'm still working, 09:39:37
unsuccessfully so far, on completely specifying 09:39:42
the actual facts, and I assume I'll have similar 09:39:44
difficulty completely specifying the 09:39:50
hypothetical. 09:39:51
Q Are you saying you can't answer my 09:39:52
question? 09:39:53
A The greater the degree of 09:39:53
asset/liability mismatch, as it is called, the 09:39:56

Page 32

BLACK
greater the associated degree of liquidity risk. 09:40:01
I used "significant" to suggest 09:40:06
that if the weighted average liability is 3.12 09:40:09
years, and the weighted average assets are 3.23 09:40:16
years, probably that isn't enough of a 09:40:20
difference to pose a significant liquidity risk. 09:40:21
There's not a single threshold cut-off. The 09:40:26
greater the asset/liability mismatch, the 09:40:32
greater the extent to which the financial 09:40:34
institution will be exposed to liquidity risk. 09:40:36
Q Okay. 09:40:41
A But there are other factors that 09:40:41
would enter into the assessment of liquidity 09:40:43
risk as well. 09:40:45
Q I was just focusing on that one. 09:40:49
So you're clear, I'm going to step 09:40:52
away for a moment from this Bernard Black 09:40:53
hypothetical. I'm going to come back to it, but 09:40:56
stepping away from it for the moment, you talked 09:41:00
about borrowing shorter, right, and that's this 09:41:03
liquidity risk you mentioned; correct? 09:41:06
A If Sigma is on the whole borrowing 09:41:08
significantly shorter than its assets, that 09:41:10
creates asset liability mismatch, and that 09:41:13

BLACK
creates the liquidity risk, and that risk is 09:41:16
well understood for investors in financial 09:41:20
institutions because it is a risk that many 09:41:24
financial institutions face through the nature 09:41:27
of their operations. 09:41:30
Q In 2007, how many financial 09:41:31
institutions in the United States were borrowing 09:41:34
shorter than their assets? 09:41:36
A My off-the-cuff guess is all of 09:41:46
them. It's possible that it was less than all 09:41:47
of them, but that would be a standard strategy 09:41:49
for many, if not all, major financial 09:41:53
institutions. On the whole, their liabilities 09:41:57
would be shorter dated than their assets. 09:42:01
That would almost surely be true 09:42:05
for commercial banks. I'm less confident of it 09:42:08
for the investment banks that then existed, and 09:42:10
no longer exist in part because they faced 09:42:15
liquidity risk, which suggests that probably 09:42:18
they had this mismatch as well. It is a very 09:42:22
common feature of financial institutions. 09:42:25
Q What was the difference, the 09:42:27
average difference, in June 2007 between the 09:42:30
weighted average life of assets and liabilities 09:42:38

BLACK
in American financial institutions? 09:42:44
A I do not know. 09:42:46
Q Do you have any idea? 09:42:49
A I would not want to estimate. 09:42:49
That information about the extent of 09:42:55
asset/liability mismatch is something you can 09:42:57
assess through a careful reading of the very 09:43:01
complicated financial statements that commercial 09:43:02
banks provide, and part of the reason they're 09:43:05
complicated is because they need to provide 09:43:09
enough information to assess -- for investors to 09:43:11
assess this, and other risks. 09:43:13
Q You haven't done any of that work, 09:43:15
to read those financial statements; right? 09:43:17
MR. LeVAN: Objection. 09:43:19
A For purposes of this report, I 09:43:20
have not. I am generally familiar with the 09:43:21
asset/liability mismatch that exists at many 09:43:25
financial institutions, and some of the 09:43:29
responses of banks and regulators to the 09:43:33
resulting liquidity risk. 09:43:36
Q You mean you're generally familiar 09:43:39
in that you've read it in the newspaper? 09:43:41
A No. I am familiar with the 09:43:43

BLACK
problem. It is well known and well understood 09:43:50
as a risk faced by financial institutions, 09:43:52
sufficiently so that we have developed 09:43:56
regulatory responses to it. Those responses 09:43:58
turned out to be insufficient in the recent 09:44:03
financial crisis, but the concept is not new, 09:44:09
the problem is not new, the risk is well known. 09:44:13
The extent of it will depend on the extent of 09:44:20
asset/liability mismatch, and also on the extent 09:44:22
of the bank's capital cushion in the form of 09:44:27
equity, or perhaps some form of quasi-equity. 09:44:32
Q So you cannot tell us how the gap 09:44:37
between the weighted average life of Sigma's 09:44:39
assets and liabilities in June 2007 compared to 09:44:41
the average gap in American financial 09:44:45
institutions; is that correct? 09:44:48
MR. LeVAN: Objection. 09:44:51
A I do not know the weighted average 09:44:52
life, or the distribution of lives, which is 09:44:57
also important in assessing asset/liability 09:45:00
mismatch, of other financial institutions, 09:45:04
because I haven't gone and tried to assess it 09:45:06
for purposes of this assignment. 09:45:08
Q Right. 09:45:10

BLACK
Now, let's go back to our Bernard 09:45:11
Black Bank hypothetical. We talked about the 09:45:12
significantly shorter part of what you had 09:45:19
mentioned, now I'd like to ask a question or two 09:45:21
about another element that we're looking at to 09:45:23
determine whether this hypothetical bank has a 09:45:25
repo cliff, and that is it has to have some 09:45:27
amount of repo. 09:45:31
If I go to my investment advisor 09:45:33
and I'm concerned because I've read your expert 09:45:35
report, which introduces the new concept of repo 09:45:37
cliff, and I want to know whether there's a repo 09:45:40
cliff here so that I should be aware of it 09:45:43
before I buy the medium-term notes of the Black 09:45:45
Bank, I'm going to ask my investment advisor, 09:45:48
"Does this bank have too much repo so that it 09:45:52
has a repo cliff," what questions or information 09:45:56
should my investment advisor get in order to 09:46:01
tell me whether the Black Bank is facing a repo 09:46:03
cliff because it has too much repo? 09:46:07
MR. LeVAN: Objection. 09:46:10
Q Just tell me what information that 09:46:10
investment advisor ought to go out and get to 09:46:11
make that determination. 09:46:14

BLACK

MR. LeVAN: Objection. 09:46:19

A I would want the investment 09:46:20 advisor to understand at least the extent of 09:46:21 equity, or in the case of Sigma, quasi-equity 09:46:33 cushion underneath the medium-term notes. I 09:46:38 would want the investment advisor to assess that 09:46:42 based on the current saleable values of the 09:46:45 Black Bank's assets, because, after all, the 09:46:51 underlying problem is that the assets are 09:46:57 maturing slower than the liabilities. One way 09:46:58 of addressing that mismatch is to sell the 09:47:01 assets. So the price at which you could tell 09:47:04 the assets in the market is an important element 09:47:07 of this analysis. 09:47:10

Q Is there a quantitative test that 09:47:16 my investment advisor can use to judge whether 09:47:17 there is really a problem with the amount of 09:47:22 repo? 09:47:23

A So -- let me describe it this way, 09:47:30 if I can, which is consistent with the analysis 09:47:32 that Professor Metrick provides in his rebuttal 09:47:36 report. 09:47:39

If the repo margin is 10 percent, 09:47:41 so that the Black Bank can borrow under repo 09:47:53

BLACK

90 percent of the market value of its assets, 09:48:03 and if it is also the case that the market value 09:48:09 of its assets -- saleable market value, not the 09:48:15 theoretical market value if held to maturity, 09:48:18 because they may not be able to hold them to 09:48:20 maturity, but the current saleable value in this 09:48:22 time of financial distress is greater than 09:48:28 111.1 percent of the amount of the Black Bank's 09:48:35 shorter term obligations, its commercial paper 09:48:44 and medium-term notes, and if, notwithstanding 09:48:48 developments in the market, the market value of 09:48:58 the assets remains above this 111.1 percent 09:48:59 threshold, and if the repo lenders agree with 09:49:06 this market value, because they're lending 09:49:12 against their assessment of market value, not 09:49:15 Bernie Black's assessment of market value -- I 09:49:18 have to get them to lend me based on their 09:49:21 value -- then it would be possible, in 09:49:23 principle, for the Black Bank to borrow enough 09:49:30 under repo to pay off all other creditors, and 09:49:32 there would be no potential for a repo cliff. 09:49:38

That is Professor Metrick's 09:49:40 analysis, and I agree with it. 09:49:42

Q Now, you had previously given us 09:49:49

BLACK

your recollection of certain financial 09:49:51 characteristics of Sigma as of August 2007. I'm 09:49:55 not asking you to repeat that, I'm just 09.49:58 referring to it. 09:49:59

You remember you gave some 09:50:00 testimony about the book and market value of 09:50:02 Sigma's assets in August 2007, and the amount of 09:50:07 their senior notes, commercial paper and cap 09:50:12 notes? 09:50:16

You recall that testimony; 09:50:18 correct? 09:50:18

A I do. 09:50.20

Q You would agree that as of 09:50:21 August 2007, based on the recollection of the 09:50:22 financial situation of Sigma as you had put it, 09:50:24 Sigma did not have a repo cliff at that point; 09:50:28 is that correct? 09:50:31

A As of August 2007, I would not 09:50:33 have viewed what I describe as the repo cliff 09:50:37 risk as an important risk because -- for a 09:50:45 couple of reasons 09:50:52

First, there was at this time 09:50:53 still significant value in the assets over and 09:50:54 above the amount of Sigma's commercial paper MTN 09:51:00

BLACK

liabilities, and the amount of repo was 09:51:06 relatively modest. So standing in August 2007, 09:51:11 if I were analyzing Sigma, I wouldn't say, "Oh, 09:51:14 my God, we're just about to fall off of a repo 09:51:18 cliff." 09:51:20

Q Okay. 09:51:21

Now, you mentioned Mr. Metrick's 09:51:22 report a minute ago; correct? 09:51:24

A Yes. Although I should add that I 09:51:26 do not have clear in my mind what was in his 09:51:30 report versus what was in his deposition 09:51:35 testimony, so let me treat the two together as 09:51:42 his opinions. 09:51:45

So the 111.1 percent is entirely 09:51:46 clear in his deposition testimony. I don't 09:51:48 remember whether he uses that number in his 09:51:50 report or not. 09:51:52

MR. CLAYTON: Okay, let's mark 09:51:56 this. 09:51:57

We've already marked as Exhibits 1 09:51:58 and 2, although I haven't shown them to 09:52:00 the witness, his report and his rebuttal 09:52:02 report, but we'll show that to him 09:52:04 later. 09:52:06

BLACK

a working paper, I don't have any particular 09:57:54 problem saying, "Here are the slides that I 09:57:58 presented, you know, two weeks ago at University 09:58:00 of Western Ontario, and before that at the 09:58:04 following list of places." It's not like 09:58:09 they're hidden in some way. 09:58:11

Q Other than these slides and the 09:58:13 draft paper, I take it there is no other 09:58:14 publication that you can think of in which you 09:58:15 have discussed the procedures that should be 09:58:18 followed by a prudent securities or credit 09:58:21 analyst in evaluating a security; is that right? 09:58:23

A I'm not thinking of anything in my 09:58:28 published writing that would fit within that 09:58:33 description. 09:58:35

Q What is a chartered financial 09:58:40 analyst? 09:58:41

A It's a term that the UK uses -- 09:58:46 does the U.S. use it as well? I associate it 09:58:53 with the UK, and I assume it means that someone 09:58:57 who is a chartered financial analyst has taken 09:59:00 some kind of exam, that they have passed, and 09:59:02 therefore been certified as a chartered 09:59:06 financial analyst, but I am not familiar with 09:59:08

BLACK

the details. 09:59:10

Q Certified by the UK? 09:59:12

A Certified by whatever body runs 09:59:14 the CFA exam. I believe that there's also some 09:59:18 amount of course requirements that go along with 09:59:25 this, so you can't just walk in off the street 09:59:28 and say "I want to take this exam," I believe 09:59:31 there are some classes that you have to take as 09:59:33 well. 09:59:35

Q Who runs this organization? 09:59:35

A I don't -- I have in my head this 09:59:38 sense that there's an Association of Chartered 09:59:46 Financial Analysts, but those are the members. 09:59:48 Whether they also run the exam and set up the 09:59:51 qualifications, or whether it's set up by the 09:59:55 umbrella British financial services regulator, I 10:00:01 do not know. 10:00:04

Q Outside of the UK, are there any 10:00:08 other jurisdictions where this organization is 10:00:11 active, this organization that it has connected 10:00:13 to this CFA procedure? 10:00:18

A I don't have specific knowledge, 10:00:20 but I wouldn't be surprised if a similar concept 10:00:21 were used in other English-speaking countries. 10:00:24

BLACK

Q You don't know, but it wouldn't 10:00:31 surprise you? 10:00:32

A I agree with that statement. 10:00:32

Q And if I asked you what someone 10:00:33 has to study in order to become a chartered 10:00:34 financial analyst, I take it you don't know? 10:00:37

A I certainly don't know the 10:00:41 details. 10:00:42

Q Are there work experience 10:00:43 requirements that one must meet in order to 10:00:44 become a chartered financial analyst? 10:00:46

A I don't know. 10:00:48

Q And of course, I assume you are 10:00:51 not a chartered financial analyst, because 10:00:52 otherwise you might have more familiarity with 10:00:56 these issues; is that right? 10:00:57

A I am not a chartered financial 10:00:58 analyst. 10:01:00

Q You don't have a degree in 10:01:05 economics; right? 10:01:07

A I do not. 10:01:07

Q Now, before this case, have you 10:01:16 ever given an expert opinion as to whether a 10:01:18 credit analyst or an investment analyst acted 10:01:22

BLACK

prudently? 10:01:27

A In effect, yes. 10:01:51

Q "In effect," meaning you didn't 10:01:52 actually give a clear opinion that a particular 10:01:55 person did not act prudently; is that right? 10:01:57

A So what I'm trying to do is think 10:02:03 over in my head what my past expert reports have 10:02:04 been that would be in this general space, and I 10:02:09 don't have all of them in my head, but certainly 10:02:14 I have given opinions a number of times as to 10:02:24 due diligence and red flags and what a person in 10:02:30 a particular position -- might be an outside 10:02:32 director, might be an investment bank -- ought 10:02:37 to have seen in a particular situation. 10:02:47

I don't recall offering that 10:02:51 opinion for an investment analyst, but I have 10:02:52 offered it for an investment bank. 10:02:54

Q Well, my question was about an 10:03:00 investment analyst or a credit analyst. 10:03:02

And the answer is you have not 10:03:04 done that where the question was whether an 10:03:05 investment analyst or a credit analyst acted 10:03:07 prudently or imprudently; is that correct? 10:03:10

A No, I don't -- 10:03:12

BLACK

A No. 10:08:35
Q Are you in the business of giving investment advice to anybody? 10:08:36
A I am not in that business. 10:08:39
Q Do you invest your own money? 10:08:41
A I do. 10:08:44
Q Okay. 10:08:45
Have you ever traded securities? 10:08:52
MR. LeVAN: Objection. 10:08:53
A Professionally, I have never traded securities. 10:08:55
Q And when we say "securities" I was including equity and debt securities. 10:08:58
Your answer would be the same? 10:09:00
A I have never professionally traded equity or debt securities. The plaintiffs have other experts with that expertise. That's not my expertise. 10:09:08
Q So are you relying on those other experts? 10:09:10
A In part, yes. 10:09:11
Q So you don't have expertise in the market for Sigma MTNs, primary or secondary; is that right? 10:09:24

BLACK

A I agree. 10:09:26
Q What's a SIV? S-I-V, all caps. 10:09:34
A So the acronym stands for structured investment vehicle, and I'm not sure there is a precise definition of what a SIV is, although in 2010 we should perhaps say there is no precise definition of what a SIV was, because they aren't around anymore. 10:09:55
Sigma was considered to be a SIV because it made limited-purpose investments, and financed them through the capital markets. 10:10:16
What range of investments one would have to make to be considered a SIV, I do not know. I'm not aware of a formal definition of SIV in the same way that, you know, Professor Metrick could not say exactly what is and is not a shadow bank. There might be narrow definitions, there might be broader definitions, but I am comfortable describing Sigma as a SIV, even if the Sigma principals preferred not to describe it as a SIV. 10:10:56
Q What's a limited purpose financial company? 10:11:00
A So Sigma was not in the business 10:11:01

BLACK

of -- and to my understanding, although I have not seen the documents, it is not permitted to go out and buy any kind of asset it wanted to, it had a limited purpose, and it was limited in the kinds of assets it could buy. So it couldn't go and buy that building over there (indicating), for example, and try to rent it out for enough money to more than cover the mortgage payments and taxes and whatnot. That wasn't the business that it was in. That was the real estate business. It wasn't in the real estate business, it was making a narrower set of investments in financial instruments. 10:11:43
Q Is there a difference between a SIV and a limited purpose financial company? 10:11:46
A There could be, in the sense that a real estate investment trust that invests in buildings like the building across the street I think could be fairly described as a limited purpose financial company. It invests in assets, it finances its investments in the capital markets, but it wouldn't be within the category of what people refer to as a SIV, to my understanding. 10:12:21

BLACK

Q When is the first time that you heard of Sigma Finance? 10:12:25
A For this case. 10:12:31
Q When were you retained? 10:12:39
A Sometime earlier this year. 10:12:40
Q Can you pin that down by month? 10:12:42
A Spring to summer. 10:12:53
Q Do SIVs have different modes of operation? 10:12:57
A They can. 10:12:57
Q What were the modes of operation of Sigma? 10:13:03
A At the times relevant to this case, Sigma had, according to its prospectus -- though I haven't seen its governing charter -- three modes, which are not very well-described in the prospectus. It had sort of normal operating mode; they do whatever they do, it had a restricted mode, called no growth, in which -- again, it's not completely clear from the prospectus, but they certainly couldn't increase the size of their assets, and perhaps they couldn't purchase incremental assets, in which case they would not only not be growing, they 10:13:51

BLACK

well-informed professional judgment that they would take the gamble that those MTNs would pay off, given the alternatives that were available to them of either sale or ratio trade. 11:43:30 11:43:32 11:43:38 11:43:43

Q So in order to determine whether you should have held or disposed of Sigma MTNs in 2007 and 2008, you would have to look at whether you're better off holding and waiting to see what you get at maturity, versus what you could get in a sale or a ratio trade? 11:43:51 11:43:53 11:43:57 11:44:01 11:44:03 11:44:05

A Yes. 11:44:14

Q Okay. 11:44:14

A You are comparing the alternative of holding to the alternative of sale and the alternative of ratio trade, and that would be an ongoing judgment as the market evolves. 11:44:15 11:44:16 11:44:17 11:44:20

Q Right. 11:44:25

And any one of those alternatives -- sale, ratio trade or hold to see what happens -- could well be reasonable in 2007 and 2008; right? 11:44:25 11:44:27 11:44:34 11:44:38

MR. LeVAN: Objection. 11:44:40

A Yes, with the following caveat: That I might, as a credit analyst, believe -- 11:44:47 11:44:49

BLACK

let's take the -- can't take the June 2009 MTNs, for example, because nobody else held them except JPMorgan. So let's take a -- you know, spring 2010 MTN. All right. 11:44:56 11:45:01 11:45:03 11:45:05

I might hold the 2010 MTN and think, "You know what, I don't want to hold this until maturity, I think I ought to get out of it." I can sell it, I can ratio trade it, or I can hold it today and try to get out of it tomorrow. And my professional judgment is today isn't the right time to sell, and let me see what the world looks like tomorrow, and that would be an ongoing judgment. 11:45:08 11:45:12 11:45:16 11:45:19 11:45:22 11:45:24 11:45:29 11:45:33 11:45:37

So I might have the view that, you know, if things don't improve I'm going to sell or ratio trade this asset, but either the market might improve, or for a ratio trade Sigma might decide to offer better terms for the ratio trade, so I might decide that my judgment today is to hold for today. 11:45:39 11:45:46 11:45:50 11:45:54 11:45:58 11:46:00 11:46:04

And so your question was had -- had the flavor of holding until maturity, and that's why I answered the way I did, it might be a hold for today decision. 11:46:08 11:46:14 11:46:16 11:46:16

BLACK

Q You make that decision each day, or periodically? 11:46:17 11:46:19

A Periodically. 11:46:20

Q It may be every few days or every week, but you have to make it periodically; correct? 11:46:20 11:46:23 11:46:24

A As the market changes, you would periodically be reassessing the decision to hold, sell or ratio trade. 11:46:25 11:46:26 11·46:30

Q Now, is it your assumption that no one besides JPMorgan held June 2009 Sigma MTNs as of the end of September 2008? 11:46:33 11:46:35 11:46:42

A My understanding for this particular issuance is that JPM bought a hundred percent of it, so there was nobody else to hold it. 11:46:44 11:46:45 11:46:48 11:46:50

Now, people held other similar maturities; indeed, some people held 2010 maturities. Some people ratio traded them away, and some people didn't. 11:46:50 11:46:52 11:46:54 11:46:57

Q Now, did the people who did not -- 11:46:59

MR. CLAYTON· Well, strike that. 11:47:04

Q Did the people who held maturities in Sigma as of June 2009 or later, at the time 11:47:05 11:47:06

BLACK

that Sigma collapsed at the end of September, did all of those people make mistakes in holding those securities? 11:47:11 11:47:13 11:47:19

A I do not have the information as to the information they had available or the decisions that they made, and so I'm not going to offer an opinion on whether all of those people made mistakes. 11:47:20 11:47:21 11:47:22 11:47:26 11:47:27

Q Okay. 11:47:28

Because you can understand that a decision to hold maturities even later than June 2009 could have been reasonable? 11:47:30 11:47:31 11:47:37

MR. LeVAN: Objection. 11:47:40

A I think in my report I say that what was unreasonable was not seriously exploring what was available in the way of sale or ratio trading, and what was unreasonable was not fully understanding the risks. 11:47:44 11:47:47 11:47:50 11:47:53 11:47:56

I don't think I say, "If you fully understood the risk and you fully explored these options, the only prudent course was to sell or trade." 11:47:58 11:48:01 11:48:03 11:48:08

Q Okay. 11:48:09

MR. CLAYTON: Why don't we take -- 11:48:22

BLACK

solvency or slightly over solvency or slightly 14:31:46 under solvency." 14:31:49

It would be perfectly appropriate 14:31:52 and possible to conduct the same analysis 14:31:54 starting out by assuming they're right at 14:31:57 solvency, they could pay off all their MTNs if 14:32:00 they could sell their assets for market value, 14:32:06 but if they repo them, they're going to end up 14:32:08 not paying off all their MTNs. 14:32:11

And, you know, after looking at 14:32:16 this criticism, I thought, "Well, gee, I could 14:32:18 have provided that example, too, and it would 14:32:23 have been interesting and useful to say, 'What 14:32:28 would this look like if the assets were worth 14:32:30 95 percent of the liabilities, a hundred percent 14:32:34 of the liabilities, 105 percent of the 14:32:35 liabilities,'" and show how the results varied 14:32:37 with this assumption, because I don't really 14:32:42 know what they're worth. 14:32:44

I disagree with him that the 14:32:49 starting point should have been the numbers in 14:32:51 the Sigma monthly reports, because I think those 14:32:53 were an overstatement of the market value of 14:32:55 assets, and we discussed some of that this 14:32:56

BLACK

morning, but I don't actually know what the 14:32:59 right value to plug in would have been there. 14:33:02

Q You also mention a few things that 14:33:07 he noted and you said you didn't do, and I 14:33:12 believe you said you had not, in fact, done 14:33:15 those things because you felt you didn't have 14:33:19 the data necessary to do that. 14:33:21

That was a portion of what you 14:33:24 said in your last answer; is that right? 14:33:25

A That's a fair paraphrase. 14:33:27

Q I just want to see -- I think I 14:33:28 got correctly what the things were, but I just 14:33:30 want to see if I can tick them off correctly 14:33:32 now. 14:33:34

One was you didn't do expected 14:33:35 recovery on default of Sigma, meaning expected 14:33:38 recovery of the MTNs. That was one of those 14:33:43 things; right? 14:33:47

A That's right. I did not do my own 14:33:48 analysis of expected recovery given default. 14:33:49

Q Right. 14:33:53

Second was you didn't do your own 14:33:54 analysis of the likelihood of default? 14:33:55

A That's right. 14:34:00

BLACK

Q Another item I think you mentioned 14:34:00 was you didn't analyze the potential sale price 14:34:03 of the MTNs? 14:34:07

A That's correct. 14:34:14

Q And finally, according to my 14:34:14 notes, you didn't analyze the potential value or 14:34:15 consideration that would have been received in 14:34:19 ratio trades involving the MTNs? 14:34:22

A That's right. I offer an example, 14:34:26 but the example is based on reasonable numbers, 14:34:27 but they aren't real numbers, they're my 14:34:30 estimates of what reasonable numbers might be. 14:34:33

Q Okay, fine. Okay, thank you. 14:34:36

Now, if you could just give us, to 14:34:38 the extent you have opinions in reaction to the 14:34:40 other rebuttal reports offered by the defendant, 14:34:46 other than Mr. Metrick's report, I would 14:34:49 appreciate you giving me those. 14:34:53

A Okay. 14:34:56

THE WITNESS: Can I ask for a 14:34:59 short bathroom break, please? 14:35:00

MR. CLAYTON: Absolutely. Let's 14:35:03 take a break now. 14:35:03

THE VIDEOGRAPHER: This is the 14:35:07

BLACK

videographer. We are going off the 14:35:07 record. The time is 2:34. 14:35:16

(Recess taken) 14:35:18

(Mr. Soloveichik no longer 14:55:46 present) 14:55:46

(Mr. Bee present) 14:55:48

THE VIDEOGRAPHER: We are now back 14:57:56 on the record. The time is 2:57. 14:57:57

BY MR. CLAYTON: 14:57:59

Q When we broke you were about, I 14:58:01 think, to tell us what additional opinions you 14:58:02 had based on your reading of defendant's 14:58:05 rebuttal reports other than Professor Metrick's 14:58:08 report. 14:58:11

A Okay. 14:58:12

Q Please do. 14:58:13

A How about Miss Chadwick? 14:58:13

Q Fine, let's do it. 14:58:15

A So my rebuttal report includes 14:58:20 some comments on her first report. 14:58:25

I might add to that, I didn't 14:58:30 think it was part of what needed to be in a 14:58:34 rebuttal report, but her report says, "I did an 14:58:38 analysis of what the Sigma notes were worth," 14:58:47